RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: _10/623,500A_

Source: _1Fw16_

Date Processed by STIC: _9/19/06_

ENTERED

IFW16

RAW SEQUENCE LISTING   DATE: 09/19/2006
PATENT APPLICATION: US/10/623,500A   TIME: 13:28:54

Input Set : **A:\10623500_ST25_txt.TXT**
Output Set: **N:\CRF4\09192006\J623500A.raw**

```
 3 <110> APPLICANT: Vanderkimpen, Greet
 4       Van Eldik, Gerben
 5       Meulewaeter, Frank
 7 <120> TITLE OF INVENTION: Corn root preferential promoters and uses thereof
 9 <130> FILE REFERENCE: 1021565-000119
11 <140> CURRENT APPLICATION NUMBER: US 10/623,500A
12 <141> CURRENT FILING DATE: 2003-07-22
14 <150> PRIOR APPLICATION NUMBER: US 60/399,983
15 <151> PRIOR FILING DATE: 2002-07-31
17 <160> NUMBER OF SEQ ID NOS: 31
19 <170> SOFTWARE: PatentIn version 3.3
21 <210> SEQ ID NO: 1
22 <211> LENGTH: 378
23 <212> TYPE: DNA
24 <213> ORGANISM: Zea mays
27 <220> FEATURE:
28 <221> NAME/KEY: misc_feature
29 <222> LOCATION: (1)..(338)
30 <223> OTHER INFORMATION: promoter
32 <220> FEATURE:
33 <221> NAME/KEY: misc_feature
34 <222> LOCATION: (339)..(370)
35 <223> OTHER INFORMATION: 5' UTR
37 <400> SEQUENCE: 1
38 tactacagat aacacgacag ttaacgagcg ggtatgggtt gttttccttg agcactgttg    60
40 ttctctagaa tctctgaatc tctctctgtc ttgatgacac cgagcggaaa tagcagttgg   120
42 aagaggtgat tgggcttcag cgcgcgatcc aacccaagtg ggttccacaa cgtgaacctc   180
44 atgcagctta aaatacagcc agttgtgatc catctgccac agctgtttct acctcagatg   240
46 tgctacacag tgtattacct gtttctacct cgcagatgtg ctacacagtt gcttatgact   300
48 gcctataaaa tggccgggat cggtgaggct gctggaacca aggagagaga gcatatatat   360
50 ccaccgatcc atggcatg                                                 378
53 <210> SEQ ID NO: 2
54 <211> LENGTH: 1236
55 <212> TYPE: DNA
56 <213> ORGANISM: Zea mays
59 <220> FEATURE:
60 <221> NAME/KEY: misc_feature
61 <222> LOCATION: (11)..(1196)
62 <223> OTHER INFORMATION: promoter
64 <220> FEATURE:
65 <221> NAME/KEY: misc_feature
66 <222> LOCATION: (1197)..(1228)
67 <223> OTHER INFORMATION: 5' UTR
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PATENT APPLICATION: US/10/623,500A   TIME: 13:28:54

Input Set : A:\10623500_ST25_txt.TXT
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 69 <400> SEQUENCE: 2
 70 cgggatcccg gctttctgca ctggacgtag tgtactttat acttgaaact tgtataaatt      60
 72 tgtgtctttt atactccctc agtttgaaat atagttcttt ctagcctctt tttttccgtc     120
 74 cacactcatt tgaatgataa taaatataga tatacataca aactatattc ataggttaat     180
 76 taataaatgt atatttagtc taaaatgaaa tatattttac ccatcgtatt ccttatgcat     240
 78 gaaatgttga tctacttgtc tgatggaaaa atactatgac gttgttgtac cagaccgcac     300
 80 ctaaatcaaa ctgttttcag agatggccat tctattattg tagatttgtg atacgtacga     360
 82 tgtacttttt tatccataaa ataccgtacc attatgatat ggatatcttg atgagaggga     420
 84 ctcattatct ctctctatat atataaacac ctatatatca aacaggcatc aagaaaaata     480
 86 gatgattttt ttttctgaag tagagtgaca gaagcagctg aagtgtgagt cttttttgttt    540
 88 caattttata atgtgtaaag aaaatgacgc caatgaaata tgtgtctggg ctgacgtgtt     600
 90 gtttggtgaa agccaatttt gttgtatata gggggggccag agcccagttg tatttgttgc    660
 92 ccggactggc gccaaaaaaa aaaatccgga tagtactatt ccgctaactg tgtcacactt     720
 94 tatctaaaat tagtcatcca aattaaagaa ctaaccttag atacaaaaaa ttaaacaaag     780
 96 tatgacaagt taggtagcaa actaaactaa agaggataac acaacagtta accgtcgacg     840
 98 tgcgcggcct gaatttacta ctacagataa cacgacagtt aacgagcggg tatgggttgt     900
100 tttccttgag cactgttgtt ctctagaatc tctgaatctc tctctgtctt gatgacaccg     960
102 agcggaaata gcagttggaa gaggtgattg ggcttcagcg cgcgatccaa cccaagtggg    1020
104 ttccacaacg tgaacctcat gcagcttaaa atacagccag ttgtgatcca tctgccacag    1080
106 ctgtttctac ctcagatgtg ctacacagtg tattacctgt ttctacctcg cagatgtgct    1140
108 acacagttgc ttatgactgc ctataaaatg gccgggatcg gtgaggctgc tggaaccaag    1200
110 gagagagagc atatatatcc accgatccat ggcatg                              1236
113 <210> SEQ ID NO: 3
114 <211> LENGTH: 592
115 <212> TYPE: DNA
116 <213> ORGANISM: Artificial
118 <220> FEATURE:
119 <223> OTHER INFORMATION: cDNA of the GL4 transcript
122 <220> FEATURE:
123 <221> NAME/KEY: misc_feature
124 <222> LOCATION: (540)..(540)
125 <223> OTHER INFORMATION: n at position 540 represents any nucleotide
127 <400> SEQUENCE: 3
128 caaggagaga gagcatatat atccaccgat catgatgaag ggtggcagca agaaggaagt      60
130 ggccggtgcg gcggcggtgg tggccatact gctggttctg cagctgatgg cagctccacc     120
132 gacggccatg gccgcccgct cgccgcgcgg agccgtgccg gatggctccc tcgccacgac     180
134 gcccaaggtg acgatgctgt cagccacgct gtgctacacg ggggagacat gcaaatacat     240
136 tacctgcctc actcctgctt gctcctgtaa ctatgatgat cgtcgctgct acatcatatt     300
138 tactcctgct gctgcttgag gccattctgt gtacgtgaat gaagccacta ctactctcac     360
140 acagcatgcg ccggccgacg acgtgcgtac gtatatatat acgctctacc tcgtgagctt     420
142 ttgttcgagt gatacgtgtt tcaaggcatc catccatcca tggatgctta tgtacgtata     480
W--> 144 tgtgttagtc gtgtgtcagg caaccgggca gcagaagggg gtgttgtatt atatatattn     540
146 acgtcttctg gtgattaaat aataaagggg ggcatgttgg atgtgtgcaa aa              592
149 <210> SEQ ID NO: 4
150 <211> LENGTH: 95
151 <212> TYPE: PRT
152 <213> ORGANISM: Zea mays
154 <400> SEQUENCE: 4
156 Met Met Lys Gly Gly Ser Lys Lys Glu Val Ala Gly Ala Ala Ala Val
```

RAW SEQUENCE LISTING   DATE: 09/19/2006
PATENT APPLICATION: US/10/623,500A   TIME: 13:28:54

Input Set : A:\10623500_ST25_txt.TXT
Output Set: N:\CRF4\09192006\J623500A.raw

```
157 1               5                 10                15
160 Val Ala Ile Leu Leu Val Leu Gln Leu Met Ala Ala Pro Pro Thr Ala
161             20                25                30
164 Met Ala Ala Arg Ser Pro Arg Gly Ala Val Pro Asp Gly Ser Leu Ala
165         35                40                45
168 Thr Thr Pro Lys Val Thr Met Leu Ser Ala Thr Leu Cys Tyr Thr Gly
169      50                55                60
172 Glu Thr Cys Lys Tyr Ile Thr Cys Leu Thr Pro Ala Cys Ser Cys Asn
173 65                70                75                80
176 Tyr Asp Asp Arg Arg Cys Tyr Ile Ile Phe Thr Pro Ala Ala Ala
177             85                90                95
180 <210> SEQ ID NO: 5
181 <211> LENGTH: '535
182 <212> TYPE: DNA
183 <213> ORGANISM: Artificial
185 <220> FEATURE:
186 <223> OTHER INFORMATION: cDNA of the GL5 transcript
189 <220> FEATURE:
190 <221> NAME/KEY: misc_feature
191 <222> LOCATION: (82)..(82)
192 <223> OTHER INFORMATION: n represents any nucleotide
194 <400> SEQUENCE: 5
195 ccaatcagat agagagcata gtcgatcatg aagggtggca agaagaaagt ggccggtgcg    60
W--> 197 gtggtggcca tactgctggt tntgcagctc atggcagctc caccgacggc catggccgcc   120
199 cgctcgccgc gcggagccgt gccggatggc tccctcgcca cgacgcccaa ggtgacgatg   180
201 ctgtcggcca cgctgtgcta cacgggggag acatgcaaat acattggctg cctcactcct   240
203 gcttgctcct gcaactatag tgatcgtcta tgctacatca tatttactcc tgttgcttga   300
205 ggccattccg. cgaagccaca actcttacaa tatgcatgcg ccggccgacg acgacgcgcg   360
207 ctgcctctcg tgagcttctg ttcaagtgat gcatgtttca aggcatccat ggatgcttta   420
209 cgtatatgcg tattaattag ccgtgtcagg gaaccggaca gaaggggggtg ttgtttata    480
211 tttacgtctt ctggtgatca aataaagggg aaatatatgt tggatgtgtg caaaa         535
214 <210> SEQ ID NO: 6
215 <211> LENGTH: 90
216 <212> TYPE: PRT
217 <213> ORGANISM: Zea mays
219 <400> SEQUENCE: 6
221 Met Lys Gly Gly Lys Lys Glu Val Ala Gly Ala Val Val Ala Ile Leu
222 1               5                 10                15
225 Leu Val Leu Gln Leu Met Ala Ala Pro Pro Thr Ala Met Ala Ala Arg
226             20                25                30
229 Ser Pro Arg Gly Ala Val Pro Asp Gly Ser Leu Ala Thr Thr Pro Lys
230         35                40                45
233 Val Thr Met Leu Ser Ala Thr Leu Cys Tyr Thr Gly Glu Thr Cys Lys
234      50                55                60
237 Tyr Ile Gly Cys Leu Thr Pro Ala Cys Ser Cys Asn Tyr Ser Asp Arg
238 65                70                75                80
241 Leu Cys Tyr Ile Ile Phe Thr Pro Val Ala
242             85                90
245 <210> SEQ ID NO: 7
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RAW SEQUENCE LISTING   DATE: 09/19/2006
PATENT APPLICATION: US/10/623,500A   TIME: 13:28:54

Input Set : A:\10623500_ST25_txt.TXT
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```
246 <211> LENGTH: 24
247 <212> TYPE: DNA
248 <213> ORGANISM: Artificial
250 <220> FEATURE:
251 <223> OTHER INFORMATION: oligonucleotide primer GVK27
253 <400> SEQUENCE: 7
254 gctgacagca tcgtcacctt gggc                                    24
257 <210> SEQ ID NO: 8
258 <211> LENGTH: 25
259 <212> TYPE: DNA
260 <213> ORGANISM: Artificial
262 <220> FEATURE:
263 <223> OTHER INFORMATION: oligonucleotide primer GVK28
265 <400> SEQUENCE: 8
266 gctgcagaac cagcagtatg gccac                                   25
269 <210> SEQ ID NO: 9
270 <211> LENGTH: 27
271 <212> TYPE: DNA
272 <213> ORGANISM: Artificial
274 <220> FEATURE:
275 <223> OTHER INFORMATION: oligonucleotide primer GVK29
277 <400> SEQUENCE: 9
278 catgccatgg atcggtggat atatatg                                 27
281 <210> SEQ ID NO: 10
282 <211> LENGTH: 25
283 <212> TYPE: DNA
284 <213> ORGANISM: Artificial
286 <220> FEATURE:
287 <223> OTHER INFORMATION: oligonucelotide primer GVK30
289 <400> SEQUENCE: 10
290 catgccatgg atcgactatg ctctc                                   25
293 <210> SEQ ID NO: 11
294 <211> LENGTH: 164
295 <212> TYPE: DNA
296 <213> ORGANISM: Artificial
298 <220> FEATURE:
299 <223> OTHER INFORMATION: cDNA of 3' end of the GL12 transcript
302 <220> FEATURE:
303 <221> NAME/KEY: misc_feature
304 <222> LOCATION: (45)..(45)
305 <223> OTHER INFORMATION: n= any nucleotide
307 <220> FEATURE:
308 <221> NAME/KEY: misc_feature
309 <222> LOCATION: (53)..(53)
310 <223> OTHER INFORMATION: n= any nucleotide
312 <220> FEATURE:
313 <221> NAME/KEY: misc_feature
314 <222> LOCATION: (57)..(57)
315 <223> OTHER INFORMATION: n= any nucleotide
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PATENT APPLICATION: US/10/623,500A   TIME: 13:28:54

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```
317 <220> FEATURE:
318 <221> NAME/KEY: misc_feature
319 <222> LOCATION: (59)..(59)
320 <223> OTHER INFORMATION: n= any nucleotide
322 <220> FEATURE:
323 <221> NAME/KEY: misc_feature
324 <222> LOCATION: (61)..(61)
325 <223> OTHER INFORMATION: n= any nucleotide
327 <220> FEATURE:
328 <221> NAME/KEY: misc_feature
329 <222> LOCATION: (88)..(88)
330 <223> OTHER INFORMATION: n= any nucleotide
332 <220> FEATURE:
333 <221> NAME/KEY: misc_feature
334 <222> LOCATION: (93)..(93)
335 <223> OTHER INFORMATION: n= any nucleotide
337 <220> FEATURE:
338 <221> NAME/KEY: misc_feature
339 <222> LOCATION: (96)..(96)
340 <223> OTHER INFORMATION: n= any nucleotide
342 <220> FEATURE:
343 <221> NAME/KEY: misc_feature
344 <222> LOCATION: (126)..(126)
345 <223> OTHER INFORMATION: n= any nucleotide
347 <220> FEATURE:
348 <221> NAME/KEY: misc_feature
349 <222> LOCATION: (157)..(157)
350 <223> OTHER INFORMATION: n= any nucleotide
352 <400> SEQUENCE: 11
```
W--> 353 ttttacacac atccaacatg ccccccttta ttatttaatc accanaagac gtnaatntnt   60
```
355 nttattcaac accccctttt gctgcccngg tgnctnacac accactaaca catttccgtt     120
357 cataancatt catgctgggc cgcgctgtgc ccgacanctt aaac                      164
360 <210> SEQ ID NO: 12
361 <211> LENGTH: 8514
362 <212> TYPE: DNA
363 <213> ORGANISM: Artificial
365 <220> FEATURE:
366 <223> OTHER INFORMATION: plasmid pTWV011
369 <220> FEATURE:
370 <221> NAME/KEY: misc_feature
371 <222> LOCATION: (52)..(1)
372 <223> OTHER INFORMATION: LB= left T-DNA border
374 <220> FEATURE:
375 <221> NAME/KEY: misc_feature
376 <222> LOCATION: (318)..(58)
377 <223> OTHER INFORMATION: 3' nos
379 <220> FEATURE:
380 <221> NAME/KEY: misc_feature
381 <222> LOCATION: (888)..(337)
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RAW SEQUENCE LISTING ERROR SUMMARY   DATE: 09/19/2006
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Please Note:
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the
Sequence Listing to ensure that a corresponding explanation is presented in the <220>
to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:3; N Pos. 540
Seq#:5; N Pos. 82
Seq#:11; N Pos. 45,53,57,59,61,88,93,96,126,157
Seq#:13; N Pos. 5630,8436
Seq#:26; N Pos. 1
Seq#:27; N Pos. 1,11
Seq#:28; N Pos. 4,9
Seq#:29; N Pos. 5
Seq#:30; N Pos. 1
Seq#:31; N Pos. 2,6

Invalid <213> Response:
Use of "Artificial" only as "<213> Organism" response is incomplete,
per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:3,5,7,8,9,10,11,12,13,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31

VERIFICATION SUMMARY   DATE: 09/19/2006
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Input Set : **A:\10623500_ST25_txt.TXT**
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```
L:144 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:480
L:197 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:60
L:353 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:0
M:341 Repeated in SeqNo=11
L:991 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:5580
M:341 Repeated in SeqNo=13
L:1294 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26 after pos.:0
L:1317 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27 after pos.:0
L:1350 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28 after pos.:0
L:1368 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:29 after pos.:0
L:1386 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:30 after pos.:0
L:1409 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:31 after pos.:0
```